IN THE CLAIMS

1. (currently amended)   A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases~~ selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of

      i) contacting a test compound with aPDE1B polypeptide,

      ii) detecting ~~detect~~ binding of said test compound to said PDE1B polypeptide.

2. (currently amended)   A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases~~ selected from the group consisting of cardiovascular dis- orders, metabolic diseases, gastrointestinal and liver diseases, cancer dis- orders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of

      i) determining the activity of aPDE1B polypeptide at a certain concentration of a test compound or in the absence of said test compound,

      ii) determining the activity of said polypeptide at a different concentration of said test compound.

3. (currently amended)   A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases~~ selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of

      i) determining the activity of aPDE1B polypeptide at a certain concentration of a

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test compound,

ii) determining the activity ofaPDE1B polypeptide at the presence ofa compound known to be a regulator of aPDE1B polypeptide.

4-11. (canceled)

12. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease ~~comprised in a group of diseases~~ selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising the steps of

i) contacting a test compound with a PDE1 B polynucleotide,

ii) detect binding of said test compound to saidPDE1B polynucleotide.

13. (original) The method of claim 12 wherein the nucleic acid molecule is RNA.

14. (original) The method of claim 12 wherein the contacting step is in or at the surface of a cell.

15. (original) The method of claim 12 wherein the contacting step is in a cell-free system.

16. (original) The method of claim 12 wherein polynucleotide is coupled to a detectable label.

17. (original) The method of claim 12 wherein the test compound is coupled to a detectable label.

18. (currently amended) A method of diagnosing a disease ~~comprised in a group of diseases~~ selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory

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diseases, neurological disorders and urological disorders in a mammal comprising the steps of

i) determining the amount ofaPDE1B polynucleotide in a sample taken from said mammal,

ii) determining the amount ofPDE1B polynucleotide in healthy and/or diseased mammals.

19-20. (canceled)

21. (currently amended) A pharmaceutical composition for the treatment of a disease ~~comprised in a group of diseases~~ selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising a therapeutic agent which regulates the activity of aPDE1B polypeptide, wherein said therapeutic agent is

i) a small molecule,

ii) an RNA molecule,

iii) an antisense oligonucleotide,

iv) a polypeptide,

v) an antibody, or

vi) a ribozyme.

22. (currently amended) A pharmaceutical composition for the treatment of a disease ~~comprised in a group of diseases~~ selected from the group consisting of cardiovascular disorders, metabolic diseases, gastrointestinal and liver diseases, cancer disorders, hematological disorders, respiratory diseases, neurological disorders and urological disorders in a mammal comprising a

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PDE1B polynucleotide or a PDE1B polypeptide.

     23-26. (canceled)